

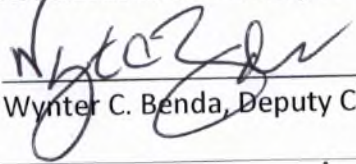


To the Honorable Council  
City of Norfolk, Virginia

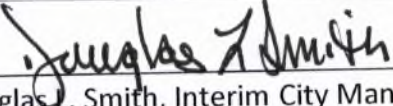
April 25, 2017

From: George M. Homewood, FAICP, CFM, Planning Director

Subject: **Text amendment to section 11-3 "Floodplain/Coastal Hazard Overlay Districts FPCHO" of the City's Zoning Ordinance, in order to clarify requirements for accessory structures and to clarify terms**

Reviewed:   
Wynter C. Benda, Deputy City Manager

Ward/Superward: Citywide

Approved:   
Douglas L. Smith, Interim City Manager

Item Number: **PH-1**

I. **Staff Recommendation:** Approval.

II. **Commission Action:**

- By a vote of **7 to 0**, the Planning Commission recommends **Approval**.

III. **Request:** to amend section 11-3 "Floodplain/Coastal Hazard Overlay Districts FPCHO" of the City's *Zoning Ordinance*, in order to clarify construction requirements for accessory structures and to clarify terms.

IV. **Applicant:** City Planning Commission

V. **Description:**

- This text amendment will modify the existing Floodplain/Coastal Hazard Overlay District (FPCHO) to identify construction requirements for detached accessory structures on residential lots and to add definitions and terms to be consistent with Federal requirements.
- After the adoption of the new Flood Maps, City staff was notified that additional provisions needed to be added for the regulation of accessory structures to residential uses located within the special flood hazard area.
  - For accessory structures 600 square feet or smaller, the development criteria allow for wet-floodproofing of the structure.
    - Structures would be required to be built of flood-resistant material below the Base Flood Elevation and have flood vents installed so as to allow water to enter and exit the structure and limit the ability of water to displace the building off of the foundation.
  - For accessory structures larger than 600 square feet, the development criteria require the building to be dry-floodproofed.

- Dry-floodproofing seals a structure and limits the amount of water entering the structure.
- Residential structures typically known as carriage houses or accessory dwelling units over garages are not limited in size by the floodplain regulations.
  - Development standards for these types of structures must still comply with residential construction requirements of the floodplain regulations.

**VI. Historic Resources Impacts:**

- N/A

**VII. Public Schools Impacts**

- N/A

*Staff contact: Bobby Tajan at (757) 664-4756, [robert.tajan@norfolk.gov](mailto:robert.tajan@norfolk.gov)*

**Attachments:**

- Proponents and Opponents
- Staff Report to CPC dated March 23, 2017 with attachments
- Ordinance



**Planning Commission Public Hearing: March 23, 2017**

Executive Secretary: George M. Homewood, FAICP, CFM

Planner: Robert J. Tajan, AICP, CFM

*[Signature]*

*[Signature]*

Staff Report	Item No. 1	
Applicant	City Planning Commission	
Request	Zoning Text Amendment	Amend section 11-3 "Floodplain/Coastal Hazard Overlay Districts FPCHO" of the City's <i>Zoning Ordinance</i> , in order to clarify requirements for accessory structures.

**A. Summary of Request**

This text amendment will modify the existing Floodplain/Coastal Hazard Overlay District (FPCHO) to identify construction requirements for detached accessory structures on residential lots and to add definitions and terms to be consistent with Federal requirements.

**B. Plan Consistency**

- The Promoting Environmental Sustainability chapter of *plaNorfolk2030* includes an outcome calling for reduced risk and increased resilience to gradual and catastrophic natural events, along with an action calling for evaluating options to mitigate the impacts of such hazards.
  - The proposed changes will reduce the flood risk to accessory structures, making the proposed changes consistent with *plaNorfolk2030*.

**C. Zoning Analysis**

**i. General**

- During the Flood Insurance Rate Map (FIRM) adoption process, FEMA reviewed our floodplain ordinance for consistency with Federal requirements.
- After the adoption of the FIRM City staff was notified that provisions are required to be added for the regulation of accessory structures to residential uses.
  - FEMA requires accessory structures to residential uses in the AE, AH, and AO flood zones to have different development requirements based on the size of the structure.
  - For accessory structures 600 square feet or smaller, the development criteria allow for wet-floodproofing of the structure.
    - i. Structures would be required to be built of flood-resistant material below the Base Flood Elevation and have flood vents installed so as to allow water to enter and exit the structure and limit the ability of water to displace the building off of the foundation.
  - For accessory structures larger than 600 square feet, the development criteria require the building to be dry-floodproofed.

- i. Dry-floodproofing seals a structure and limits the amount of water entering the structure.
  - ii. Foundation design must be stronger to withstand hydrostatic and hydrodynamic forces.
  - iii. The plans for this type of structure are required to be designed by a design professional compliant with the engineering standards for dry-floodproofing.
- Residential structures typically known as carriage houses or accessory dwelling units over garages are not limited in size by the floodplain regulations.
  - Development standards for these types of structures must still comply with residential construction requirements of the floodplain regulations.
  - Residential construction requirements in the floodplain require the finished floor of the residence be elevated to the Base Flood Elevation plus an additional three (3) foot freeboard.
  - The area under the finished floor is required to be designed with flood vents and flood-resistant materials and its use is limited to access, storage, and parking.

**D. Transportation Impacts**

N/A

**E. Historic Resource Impacts**

New accessory structures to residential uses currently must comply with the floodplain regulations; this amendment will not alter the process by which structures are have been reviewed through the Architectural Review Board.

**F. Public School Impacts**

N/A

**G. Impact on the Environment**

N/A

**H. Surrounding Area/Site Impacts**

N/A

**I. Payment of Taxes**

N/A

**J. Civic League**

N/A

**K. Communication Outreach/Notification**

Legal notification was placed in The Virginian-Pilot on March 9 and 16.



**L. Recommendation**

Staff recommends **approval** of the proposed zoning text amendment to the Floodplain/Coastal Hazard Overlay District.

**Attachments**

Proposed text

Notice from FEMA

**Proponents and Opponents**

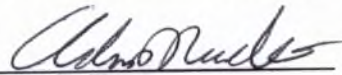
**Proponents**

None

**Opponents**


None

Form and Correctness Approved: 

By   
Office of the City Attorney

NORFOLK, VIRGINIA

Contents Approved: 

By   
DEPT.

## ORDINANCE No.

AN ORDINANCE TO AMEND AND REORDAIN SECTIONS 11-3.7 AND 11-3.12 OF THE ZONING ORDINANCE OF THE CITY OF NORFOLK, 1992, SO AS TO UPDATE CERTAIN PROVISIONS OF THE FLOODPLAIN/COASTAL HAZARD OVERLAY DISTRICTS (FPCHO) RELATING TO ACCESSORY STRUCTURES.

- - -

BE IT ORDAINED by the Council of the City of Norfolk:

Section 1:- That section 11-3.7 of the Code the Zoning Ordinance of the City of Norfolk, 1992 (as amended), entitled "Definitions", is hereby amended and reordained so as to update certain provisions relating to accessory structures by adding new definitions for the terms "Accessory structure," "Flood Insurance Study," "Highest adjacent grade," and "Lowest adjacent grade," and by changing the defined term "Damage, severe repetitive loss" to "Damage, repetitive loss." The text shall read as forth in "Exhibit A," attached hereto.

Section 2:- That section 11-3.12 of the Code the Zoning Ordinance of the City of Norfolk, 1992 (as amended), entitled "Specific standards in the Floodplain District", is hereby amended and reordained so as to update certain provisions relating to accessory structures. The text shall read as forth in "Exhibit B," attached hereto.

Section 3:- The Council hereby finds that this zoning amendment is required by public necessity, convenience, general welfare, or good zoning practice.

Section 4:- That this ordinance shall be in effect from the date of its adoption.

### ATTACHMENTS:

- Exhibit A (1 page)
- Exhibit B (2 pages)

## EXHIBIT A

11-3.7 *Definitions.* For the purpose of these floodplain regulations, the following definitions shall apply:

*Accessory structure:* A non-residential structure which is on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. This shall not include dwelling units commonly referred to as carriage houses, accessory dwelling units above garages or other similar residential uses.

...

*Damage, repetitive loss:* Flood-related damages to a structure sustained on two (2) separate occasions during a ten (10) year period for which the cost of repairs at the time of each flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the most recent damage occurred.

...

*Flood Insurance Study:* A report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudflow and/or flood-related erosion hazards. Norfolk's FIS is dated February 17, 2017.

...

*Highest adjacent grade:* The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

...

*Lowest adjacent grade:* The lowest elevation of the ground surface next to the walls of a structure.



## EXHIBIT B

### 11-3.12 *Specific standards in the Floodplain District.*

#### 11-3.12.1 *AE and AH Zones.* In AE and AH Zones, the following provisions shall apply:

...

- (d) *Accessory structures to residential uses:* For any new construction or substantial improvement of any accessory structure, the structure shall be constructed entirely of flood resistant materials below the DFE and shall be subject to the following standards:

- (1) Accessory structures 600 square feet and smaller:

- (i) When no space below the BFE is enclosed, the lowest floor shall be elevated at or above the BFE.
  - (ii) When any space below the BFE is enclosed, the floors below the BFE shall only be used for parking of vehicles or limited storage, and shall comply with the requirements set forth in subsection (c)(3), above.

- (2) Accessory structures larger than 600 square feet:

- (i) When no space below the BFE is enclosed, the lowest floor shall be elevated at or above the BFE.
  - (ii) When any space below the BFE is enclosed, the structure shall be flood-proofed, provided that all areas of the building components below the BFE are watertight, with walls substantially impermeable to the passage of water, and use structural components capable of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that all applicable engineering standards are satisfied.

...

11-3.12.2 *AO Zone*. In the AO Zone, the following provisions shall apply:

...

- (d) *Accessory structures to residential uses*: For any new construction or substantial improvement of any accessory structure, the structure shall be constructed entirely of flood resistant materials below the DFE-AO and shall be subject to the following standards:

- (1) Accessory structures 600 square feet and smaller:
  - (i) When no space below the flood depth is enclosed, the lowest floor shall be elevated at or above the flood depth.
  - (ii) When any space below the flood depth is enclosed, the floors below the flood depth shall only be used for parking of vehicles or limited storage, and shall comply with the requirements set forth in subsection (c)(3), above.
- (2) Accessory structures larger than 600 square feet:
  - (i) When no space below the flood depth is enclosed, the lowest floor shall be elevated at or above the flood depth.
  - (ii) When any space below the flood depth is enclosed, the structure shall be flood-proofed, provided that all areas of the building components below the flood depth are watertight, with walls substantially impermeable to the passage of water, and use structural components capable of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that all applicable engineering standards are satisfied.

...



U.S. Department of Homeland Security  
One Independence Mall, 6<sup>th</sup> Floor  
615 Chestnut Street  
Philadelphia, Pennsylvania 19106



**FEMA**

February 17, 2017

The Honorable Kenneth Cooper Alexander  
Mayor  
City of Norfolk  
810 Union Street, Suite 1001  
Norfolk, Virginia, 23510

RE: City of Norfolk, VA

CID # 510104

Dear Mayor Alexander:

I am pleased to inform you FEMA has accepted the City of Norfolk's Floodplain Management Ordinance as compliant with the National Flood Insurance Program (NFIP) as required for Norfolk City's updated Flood Insurance Rate Map (FIRM) released on February 17, 2017 with the understanding that an amendment will be adopted within 90 days (May 17, 2017) or the earliest possible date following public adoption process.

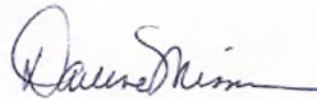
FEMA Region III communicated and informed city staff of the Region's new guidance and recommended ordinance language for adopting a square footage upper limit for accessory structures. As acknowledged in your letter dated February 15, 2017, and following a phone call with staff on February 17<sup>th</sup>, the City of Norfolk agreed to proceed with its process to adopt ordinance language related to accessory structures (nonresidential and non-habitable) that limit size to 600sq ft. Development of this type is required to meet all other minimum standards in 44 CFR Part 60 including the following:

- anchored to prevent floatation, collapse, and lateral movement (44 CFR §60.3(b)(3)(i));
- constructed with flood-resistant materials (44 CFR §60.3(b)(3)(ii));
- electrical, ventilations, and other service facilities located to prevent water from entering (44 CFR §60.3(b)(3)(iv));
- be used solely for parking, access, and storage (44 CFR §60.3(c)(5));
- and be designed to automatically equalize hydrostatic forces on exterior walls by allowing for the entry and exit of flood waters (44 CFR §60.3(c)(5)).

FEMA asks that our office be informed on the progress of your adoption milestones. Please note failure to adopt will initiate suspension proceedings from the NFIP.

Please feel free to contact me at 215-931-5667 or at [Darlene.Messina@fema.dhs.gov](mailto:Darlene.Messina@fema.dhs.gov) if you have any questions regarding the accessory structure amendment to your ordinance or any other aspect of the program. We recognize your efforts and commend you on your commitment to protect public safety and reduce future flood losses in the City of Norfolk.

Sincerely,

A handwritten signature in blue ink, appearing to read "Darlene Messina", with a long horizontal flourish extending to the right.

Darlene Messina, CFM  
Mitigation Planning Specialist  
Mitigation Division

cc: Robert Tajan, Floodplain Administrator, City of Norfolk  
Charley Banks, State NFIP Coordinator, Virginia Department of Conservation  
and Recreation



11-3.7 *Definitions.* For the purpose of these floodplain regulations, the following definitions shall apply:

*Accessory Structure:* A non-residential structure which is on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. This shall not include dwelling units commonly referred to as carriage houses, accessory dwelling units above garages or other similar residential uses.

...

*Damage, ~~severe~~ repetitive loss:* Flood-related damages to a structure sustained on two (2) separate occasions during a ten (10) year period for which the cost of repairs at the time of each flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the most recent damage occurred.

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*Highest adjacent grade:* The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

...

*Lowest adjacent grade:* The lowest elevation of the ground surface next to the walls of a structure.

11-3.12 *Specific standards in the Floodplain District.*

11-3.12.1 [AE and AH Zones.] In AE and AH Zones, the following provisions shall apply:

...

(d) *Accessory ~~buildings~~—structures to residential uses:* For any new construction or substantial improvement of any accessory ~~building~~ structure, the ~~building~~ structure shall be constructed entirely of flood resistant materials below the DFE and is subject to the following standards:

(1) Accessory structures 600 square feet and smaller:

- (i) When no space below the BFE is enclosed, the lowest floor shall be elevated at or above the BFE.
- (ii) When any space below the BFE is enclosed, the floors below the BFE shall only be used for parking of vehicles or limited storage, and shall comply with the requirements set forth in subsection (c)(3), above.

(2) Accessory structures larger than 600 square feet:

- (i) When no space below the BFE is enclosed, the lowest floor shall be elevated at or above the BFE.
- (ii) When any space below the BFE is enclosed, the structure shall be flood-proofed provided that all areas of the building components below the BFE are watertight, with walls substantially impermeable to the passage of water, and use structural components capable of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that all applicable engineering standards are satisfied.

...



11-3.12.2 [AO Zone.] In the AO Zone, the following provisions shall apply:

...

(d) *Accessory ~~buildings~~ structures to residential uses:* For any new construction or substantial improvement of any accessory ~~building~~ structure, the ~~building~~ structure shall be constructed entirely of flood resistant materials below the DFE-AO and:

(1) Accessory structures 600 square feet and smaller:

- (i) When no space below the flood depth is enclosed, the lowest floor shall be elevated at or above the flood depth.
- (ii) When any space below the flood depth is enclosed, the floors below the flood depth shall only be used for parking of vehicles or limited storage, and shall comply with the requirements set forth in subsection (c)(3), above.

(2) Accessory structures larger than 600 square feet:

- (i) When no space below the flood depth is enclosed, the lowest floor shall be elevated at or above the flood depth.
- (ii) When any space below the flood depth is enclosed, the structure shall be flood-proofed provided that all areas of the building components below the flood depth are watertight, with walls substantially impermeable to the passage of water, and use structural components capable of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that all applicable engineering standards are satisfied.

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